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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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ARENT FOX PLLC 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036			EXAMINER LAFORGIA, CHRISTIAN A	
			ART UNIT 2131	PAPER NUMBER
			MAIL DATE 05/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/501,336

Applicant(s)

LAHTI, PASI

Examiner

Christian La Forgia

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-8 have been presented for examination.

Priority

2. Acknowledgment is made of applicant's claim for priority.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter of claim 7, specifically a computer software storage medium. Since the Applicant failed to define the computer software storage medium, it is impossible to ascertain the intended scope of the claim. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 6 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As per claim 6, merely claimed as an application representing a computer listing *per se*, that is, descriptions or expressions of such a program and that is, descriptive material *per se*, non-functional descriptive material, and is not statutory because it is not a physical "thing" nor a statutory process, as there are not "acts" being performed. Such claimed applications do not define any structural and functional interrelationships between the computer program and other claimed aspects of the invention which permit the computer program's functionality to be realized. Since an application is merely a set of instructions capable of being executed by a computer, the application itself is not a process, without the

Art Unit: 2131

computer-readable medium needed to realize the computer program's functionality. In contrast, a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program's functionality to be realized, and is thus statutory. **Warmerdam**, 33 F.3d at 1361, 31 USPQ2d at 1760. **In re Sarkar**, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978). See MPEP § 2106(IV)(B)(1)(a).

6. Claim 7 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 7 requires a computer software storage medium, which the Applicant has failed to define in the specification. One of ordinary skill could reasonably conclude that the storage medium includes transmission media and carrier waves since the invention is implemented in a network environment. The Office's current position is that claims involving signals encoded with functional descriptive material do not fall within any of the categories of patentable subject matter set forth in 35 U.S.C. § 101, and such claims are therefore ineligible for patent protection. See 1300 OG 142 (November 22, 2005) (in particular, see Annex IV(c)).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2131

8. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,757,830 to Tarbotton et al., hereinafter Tarbotton, in view of U.S. Patent Application Publication No. 2003/0088680 to Nachenberg et al., hereinafter Nachenberg.

9. As per claim 1, Tarbotton teaches a method of preventing the infection of a computer network by a computer virus, where that virus can be spread by e-mail traffic, the method comprising:

installing at an e-mail gateway of the network an anti-virus application, which application scans at least incoming e-mail traffic for known viruses (Figures 1 [blocks 8, 10, 12], 2, 3 [blocks 26, 42], column 5, lines 37-41, column 5, line 59 to column 6, line 3, i.e. mail server includes anti-virus and anti-spam system that detects unwanted properties in e-mails);

a provider of the anti-virus application, sending updates to the anti-virus-application (Figure 1 [block 14], column 5, line 58 to column 6, line 3); and

at the anti-virus application, responding to said notification by failing to deliver incoming e-mails or their attachments to their recipients within the network (Figure 3 [blocks 32, 34, 36], column 6, lines 59-67, column 7, line 21-14, i.e. applying a delay based on e-mail attributes) and causing these e-mails or attachments to be re-directed to a buffer for safe storage (Figure 2 [block 16], column 6, lines 4-14, i.e. dirty mail store).

10. Tarbotton does not teach when a new virus is detected by the provider of the anti-virus application, sending a notification of this event from the provider to the anti-virus-application.

11. Nachenberg teaches an anti-virus software publisher sending updates and new virus definitions during virus outbreaks (paragraph 0088).

12. It would have been obvious to one of ordinary skill in the art at the time the invention

was made to send notification of a new virus from the anti-virus provider to the anti-virus application, since Nachenberg states at paragraphs 0007 and 0008 that such a modification would reduce damages caused to a network by allowing the system to deal with new viruses in a timely manner.

13. Regarding claim 2, Tarbotton teaches establishing a communication channel between the anti-virus application provider and the anti-virus over the internet (Figure 1 [block 6]). One of ordinary skill in the art would know that TCP/IP and UDP/IP are the most common protocols used on the Internet and Official Notice is taken of such.

14. Regarding claim 3, Nachenberg teaches the application provider sending updates to the administrator of the application (paragraph 0088). It would have been obvious to one of ordinary skill in the art at the time the invention was made to send those updates via email and Official Notice is taken of such.

15. Regarding claim 4, Tarbotton teaches wherein said notification is sent from the application provider to the application as a result of a request or enquiry sent from the application to the provider (Figure 3 [block 38], column 7, lines 1-13).

16. Regarding claim 5, Tarbotton teaches wherein, following the generation of a signature for the virus by the anti-virus application provider and the provision of that signature to the application, the application is arranged to scan the previously buffered e-mails or attachments for

Art Unit: 2131

the virus, to deliver e-mails or attachments which are virus free to their recipients, and to cause the normal handling of e-mails at the e-mail gateway to be resumed (Figure 3 [blocks 38, 40], column 7, lines 1-13).

17. As per claims 6 and 7, Tarbotton teaches an anti-virus application for installation on a network server on which is also installed an e-mail gateway, the application being arranged to interact with the e-mail gateway to scan incoming e-mails and/or e-mail attachments for known viruses, the application having

means the application to prevent delivery of e-mails or e-mail attachments received at the gateway and to divert these e-mails or attachments to a buffer for safe storage (Figures 2 [block 16], 3 [blocks 32, 34, 36], column 6, lines 4-14, column 6, lines 59-67, column 7, line 21-14, i.e. applying a delay based on e-mail attributes and storing the emails in the dirty mail store), and

means the application to cease preventing delivery of newly received e-mails or attachments (Figure 3 [blocks 38, 40], column 7, lines 1-13).

18. Tarbotton does not teach means for receiving a notification from the provider of the application regarding a new virus, and means for subsequently receiving a second notification from the provider signaling that the messages should be delivered.

19. Nachenberg teaches an anti-virus software publisher sending updates and new virus definitions during virus outbreaks (paragraph 0088).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include means for receiving a notification from the provider of the application regarding a new virus and means for subsequently receiving a second notification from the

Art Unit: 2131

provider signaling that the messages should be delivered, since Nachenberg states at paragraphs 0007 and 0008 that such a modification would reduce damages caused to a network by allowing the system to deal with new viruses in a timely manner.

21. As per claim 8, Tarbotton teaches a method of preventing the infection of a computer network by a computer virus, where that virus can be spread by e-mail traffic, the method comprising:

installing at an e-mail gateway of the network an anti-virus application, which application scans at least incoming e-mail traffic for known viruses using a database of virus signatures (Figures 1 [blocks 8, 10, 12], 2, 3 [blocks 26, 42], column 5, lines 37-41, column 5, line 59 to column 6, line 3, i.e. mail server includes anti-virus and anti-spam system that detects unwanted properties in e-mails);

a provider of the anti-virus application, calculating a checksum for the file carrying the virus or a relevant part of that file (column 9, lines 10-23), and sending a notification containing the checksum from the provider to the anti-virus-application (Figure 1 [block 14], column 5, line 58 to column 6, line 3); and

at the anti-virus application, using the checksum to screen e-mails and/or their attachments for the virus until such time as a signature for the virus is received by the e-mail gateway from the application provider (Figure 3 [blocks 26, 42], column 5, lines 37-41, column 5, line 59 to column 6, line 3, column 9, lines 10-23).

Art Unit: 2131

22. Tarbotton does not teach when a new virus is detected by the provider of the anti-virus application, sending a notification of this event and a checksum from the provider to the anti-virus-application.

23. Nachenberg teaches an anti-virus software publisher sending updates and new virus definitions during virus outbreaks (paragraph 0088).

24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to send the notification and checksum of a new virus from the anti-virus provider to the anti-virus application, since Nachenberg states at paragraphs 0007 and 0008 that such a modification would reduce damages caused to a network by allowing the system to deal with new viruses in a timely manner.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

26. The following patents are cited to further show the state of the art with respect to e-mail virus detection, such as:

United States Patent Application Publication No. 2002/0147780 to Liu et al., which is cited to show scanning e-mail to detect and eliminate computer viruses using a group of servers.

United States Patent No. 5,889,943 to Ji et al., which is cited to show e-mail virus detection and elimination.

United States Patent No. 6,993,660 to Libenzi et al., which is cited to show scanning e-mails using checksums in a distributed computing environment.

United States Patent No. 7,117,533 to Libenzi, which is cited to show screening e-mails in a distributed computing environment.

United States Patent No. 6,907,519 to Stewart et al., which is cited to show an e-mail virus protection scheme using a quarantine system.

United States Patent No. 5,832,208 to Chen et al., which is cited to show an anti-virus agent for use with mail servers.

United States Patent No. 6,269,456 to Hodges et al., which is cited to show updating and upgrading of antivirus applications over a computer network.

United States Patent No. 6,035,423 to Hodges et al., which is cited to show updating and upgrading of antivirus applications over a computer network.

United States Patent No. 7,080,000 to Cambridge, which is cited to show a method of updating a antivirus database.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792. The examiner can normally be reached on Monday thru Thursday 7-5.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2131

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christian LaForgia
Patent Examiner
Art Unit 2131

A handwritten signature in black ink, appearing to read 'CLF', with a large, stylized loop at the end.

clf